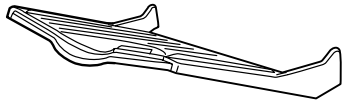
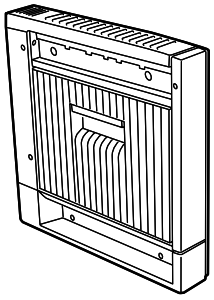
SHARP SERVICE MANUAL

CODE : 00ZARDU3//A1E

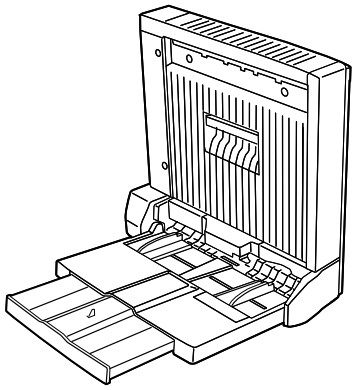
AR-TE3



AR-DU3



AR-DU4



LASER PRINTER OPTIONS

AUTO DUPLEX MODULE

MODEL AR-DU3 AR-DU4 AR-TE3

CONTENTS

[1] PRODUCT OUTLINE . . . . . 1 - 1

[2] CONFIGURATION . . . . . 2 - 1

[3] SPECIFICATIONS . . . . . 3 - 1

[4] UNPACKING AND INSTALLATION . . . . . 4 - 1

[5] EXTERNAL VIEWS AND INTERNAL STRUCTURES . . . . . 5 - 1

[6] MACHINE OPERATION . . . . . 6 - 1

[7] ADJUSTMENTS . . . . . 7 - 1

[8] DISASSEMBLY AND ASSEMBLY, MAINTENANCE . . . . . 8 - 1

[9] BLOCK DIAGRAM, WIRING DIAGRAM . . . . . 9 - 1

Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

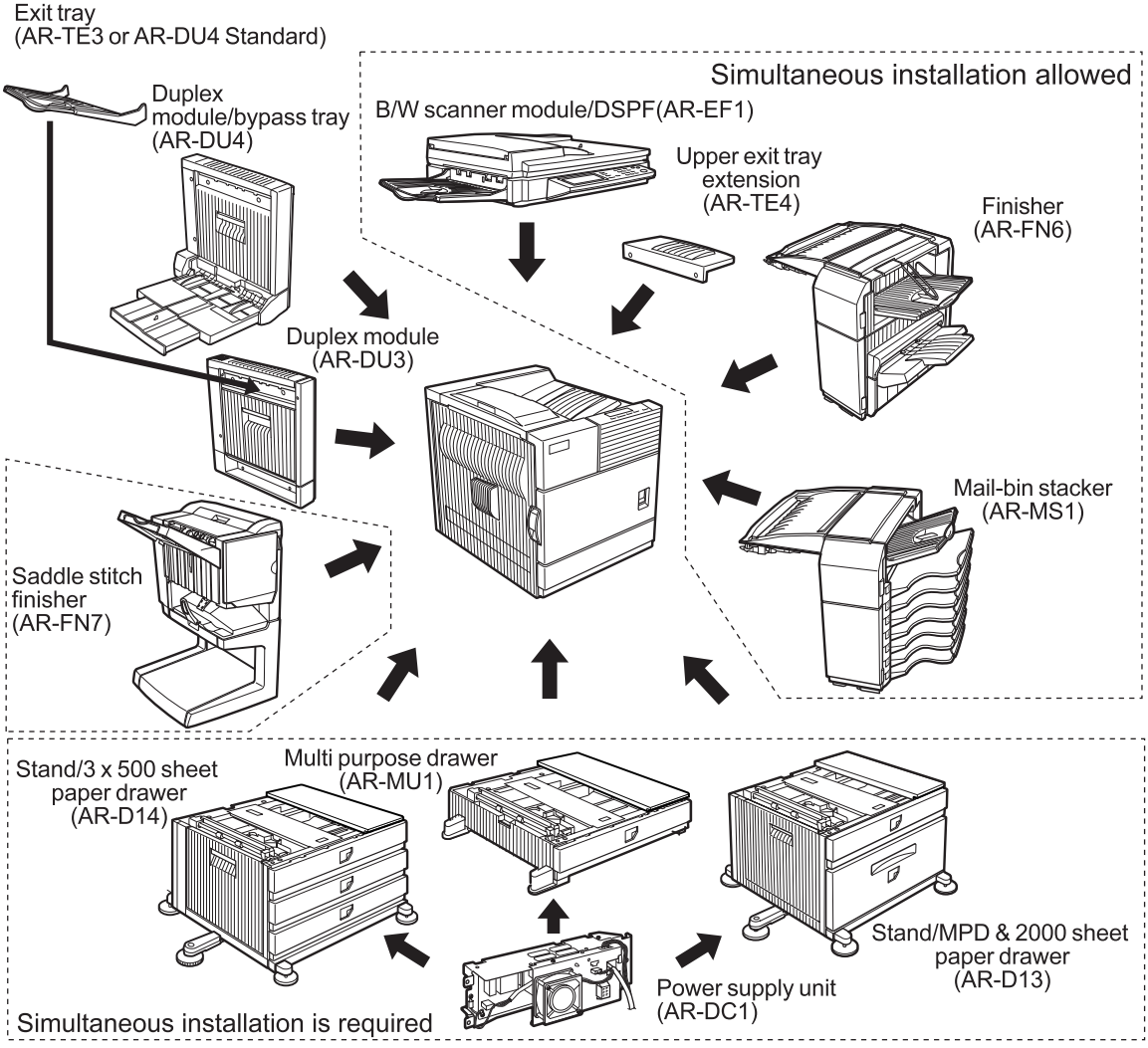
[1] PRODUCT OUTLINE

This unit is installed to the following machines to serve as a duplex module.
The AR-DU3 is equipped with the duplex feature only, and the AR-DU4 is additionally equipped with the manual paper feed feature.
AR-DU3 models is equipped with the paper exit port, which allows installation of the optional paper exit tray, the AR-TE3. (AR-DU4 standard)

Applicable models	AR-P350 / P450, AR-M350 / M450

[2] CONFIGURATION

1. To use this unit, one of the multi purpose paper feed tray (AR-MU1), the 3-stage paper feed desk (AR-D14), and the large capacity paper feed desk (AR-D13) should be installed in advance.
2. When the saddle finisher (AR-FN7) is installed, the duplex module with the manual paper feed feature (AR-DU4) cannot be installed.
3. When the saddle finisher (AR-FN7) is installed, the paper exit tray (AR-TE4) cannot be installed.



Related to paper feed unit		B/W scanner module/DSPF	Scanner rack	Multi purpose draw er	Stand/3 x 500 sheet paper dr awer	Stand/MPD & 2000 sheet	Duplex module/bypass tr ay	Duplex module	Saddle stitch finisher	Finisher	Mail-bin stacker	Exit tray	Upper exit tray extension	Punch unit	Multi-function controller board	Print server card	PS3 expansion kit	Network scanner expansion kit	Facsimile expansion kit	Fax memory (8 MB)	Power supply unit	Hard disk drive
Duplex module/bypass tray	AR-DU4			○*1			—	×	×			○*3		×							○*2	
Duplex module	AR-DU3			○*1			×	—													○*2	

○*1 =Any of the units must be installed together. ○*2 =Must be installed for installation of the stand/3 x 500 sheet paper drawer or the stand/MPD & 2000 sheet paper drawer. ○*3 =Standard. × =Cannot be installed together.

[3] SPECIFICATIONS

1. AR-DU3/AR-DU4

A.Basic

	AR-DU3	AR-DU4
Type	Automatic duplex unit	Automatic duplex unit equipped with multi-bypass tray and exit tray
Transport speed	To support 35-45 sheet/minute	
Transport alignment	Center alignment	
Power consumption	Less than about 25W	Less than about 46.6W
Power source	Supplied from main unit	
External dimensions(WxDxH)*	115x412x416 (mm)	451x439x416 (mm)
Occupied dimensions(WxD)	115x412 (mm)	451x439 (mm)
Weight	Approx. 5kg	Approx. 7.5kg

AR-DU4: When the tray is extended fully.
AR-DU3: The AR-TE3 is not installed.

B.Duplex part

Method	Non-stack method
Paper size	A3, B4, A4, A4R, B5, B5R, A5R 11"x17", 8.5"x14", 8.5"x13", 8.5"x11", 8.5"x11"R, 5.5"x8.5"R
Media for paper transfer	Plain 60-105g/m² / 15-28lbs

C.Exit tray (AR-TE3, AR-DU4)

Output paper capacity	100 sheets (A4/8.5"x11" 80g/m²)
Output paper delivery	Face-down
Output paper size	A3, B4, A4, A4R, B5, B5R, A5R 11"x17", 8.5"x14", 8.5"x13", 8.5"x11", 8.5"x11"R, 5.5"x8.5"R, Executive
Media for paper output	Plain paper 60-105g/m² / 16-28lbs Heavy paper 106-205g/m² / 29-55lbs Transparency film
Remaining paper detection	Not provided
Exit tray full detection	Not provided

D.Multi-bypass tray part (AR-DU4 only)

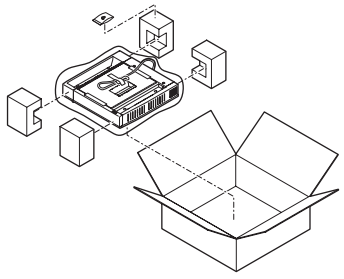
Paper size	A3, B4, A4, A4R, B5, B5R, A5R 11"x17", 8.5"x14", 8.5"x13", 8.5"x11", 8.5"x11"R, 5.5"x8.5"R, Executive, Japanese p/c	
Media available for paper feeding	Tracing paper 52-59g/m² / 14 ~ 15lbs (only single feed) Plain paper 60-128g/m² / 16 ~ 34lbs Indea paper 176g/m² / 47lbs Cover paper 205g/m² / 54 ~ 55lbs Transparency * Media heavier than 105g/m² should be A4/8.5x11" or smaller. Media heavier than 108g/m² should be fed from shorter edge. * Only single paper feed is enabled for overlay copy or copy on back-side of printed paper.	
Paper capacity	100 sheets (standard paper:80g/m²) Post card: 20 sheets Transparency film: 20 sheets	
Paper type	Plain, recycled, pre-printed, pre-punched, color, letter head, labels, heavy, transparency, Japanese p/c, envelope (User can set bi-type for each of the above paper type.)	
Paper size detection	Automatic-AB (200V system)	A3, B4, A4, A4R, B5, B5R, 8.5" ~ 13", A5R
	Automatic-inch (100V system)	11"x17", 8.5"x14", 8.5"x13", 8.5"x11", 8.5"x11"R, 7.25"x 10.5 R, 5.5"x 8.5"
	Manual	Post card
Detection ignoring setting	Provided	
Remaining paper detection	Not provided	

[4] UNPACKING AND INSTALLATION

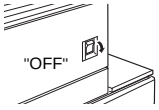
1.AR-DU3

<Before installation>

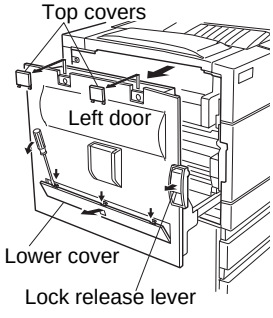
- Carry out the installation after checking that the DATA indicator on the operation panel is neither lit nor blinking.
- For installing AR-DU3, an optional desk (multi purpose drawer, stand/3 x 500 sheet paper drawer or stand/MPD & 2000 sheet drawer) must have been installed.
- Ensure that the front mounting plates and the rear mounting plates included with the optional stand/paper drawer are securely attached.
- Check that the left adjuster supplied with an optional stand/drawer has been attached.



1) Turn off the main switch of the main unit of the printer.
   Turn the main switch located on the front side of the main unit of the printer to the "OFF" position.
   Then, remove the power plug of the main unit of the printer from the outlet.



2) Remove the left side cover of the main unit of the printer.
   Unlock the lock release lever of the main unit of the printer and then pull out the left door.
   Slide the two upper covers up to remove them. Remove the lower cover by inserting a flat-blade screwdriver at three locations (⬇) shown in the illustration.
   Then, close the left door.

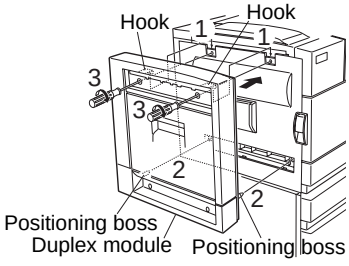


3) Attach the duplex module to the main unit of the printer.

<1>Hang the hooks located at the upper part of the duplex module on the openings of the left door of the main unit of the printer.

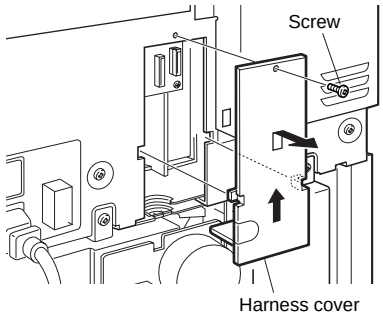
<2>Push the lower part of the duplex module to insert the positioning bosses securely into the main unit of the printer.

<3>Tighten the two screws built in the duplex module.

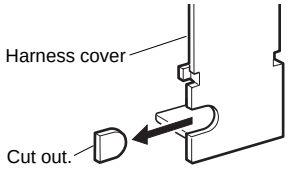


4) Connect the harness to the main unit of the printer.

<1>Remove the screw that fixes the harness cover of the main unit of the printer and then slide the harness cover up to remove it.



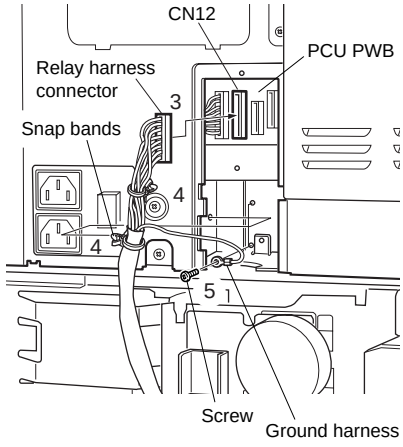
<2>Process the harness cover as shown in the illustration.



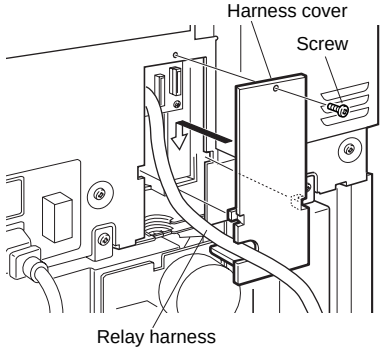
<3>Connect the connector of the relay harness of the duplex module to the CN12 (white connector) of the PCU PWB of the main unit of the printer.

<4>Insert the snap bands to the locations shown in the illustration and fix them.

<5>Secure the earth harness using a supplied M4 screw.



<6>Reattach the harness cover to its original position and fix it with the removed screw.



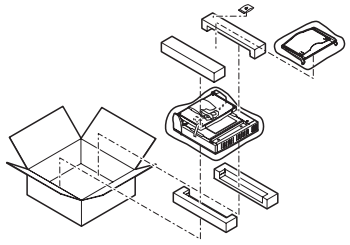
* If another peripheral device must be installed, carry out the following step at the end of the installation work.

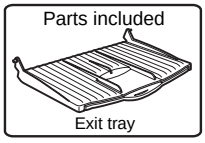
5) Carry out the off center adjustment.

2.AR-DU4

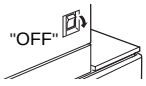
<Before installation>

- Carry out the installation after checking that the DATA indicator on the operation panel is neither lit nor blinking.
- For installing AR-DU4, an optional desk (multi purpose drawer, stand/3 x 500 sheet paper drawer or stand/MPD & 2000 sheet drawer) must have been installed.
- Ensure that the front mounting plates and the rear mounting plates included with the optional stand/paper drawer are securely attached.
- Check that the left adjuster supplied with an optional stand/drawer has been attached.

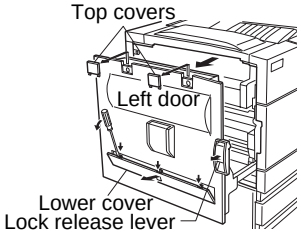




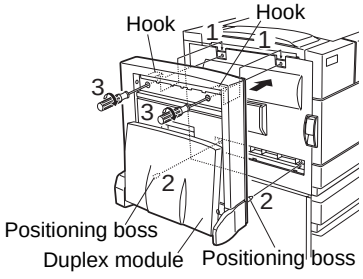
1) Turn off the main switch of the main unit of the printer.
   Turn the main switch located on the front side of the main unit of the printer to the "OFF" position.
   Then, remove the power plug of the main unit of the printer from the outlet.



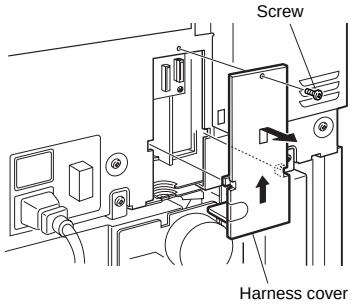
2) Remove the left side cover of the main unit of the printer.
   Unlock the lock release lever of the main unit of the printer and then pull out the left door.
   Slide the two upper covers up to remove them. Remove the lower cover by inserting a flat-blade screwdriver at three locations (⬇) shown in the illustration.
   Then, close the left door.



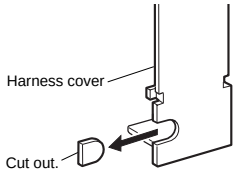
3) Attach the duplex module to the main unit of the printer.
<1>Hang the hooks located at the upper part of the duplex module on the openings of the left door of the main unit of the printer.
<2>Push the lower part of the duplex module to insert the positioning bosses securely into the main unit of the printer.
<3>Tighten the two screws built in the duplex module.



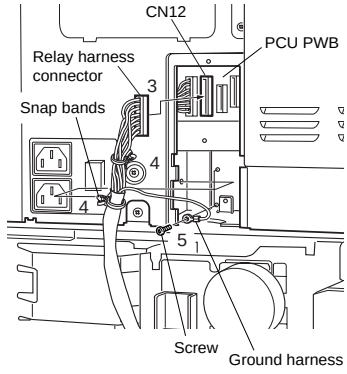
4) Connect the harness to the main unit of the printer.
<1>Remove the screw that fixes the harness cover of the main unit of the printer and then slide the harness cover up to remove it.



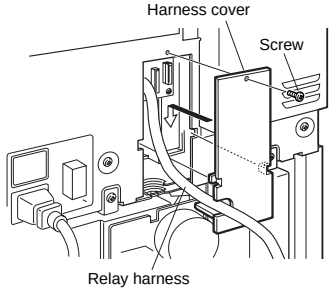
<2>Process the harness cover as shown in the illustration.



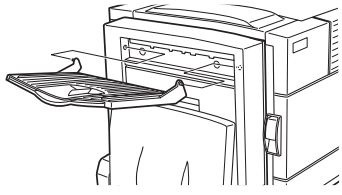
<3>Connect the connector of the relay harness of the duplex module to the CN12 (white connector) of the PCU PWB of the main unit of the printer.
<4>Insert the two snap bands to the locations shown in the illustration and fix them.
<5>Secure the earth harness using a supplied M4 screw.



<6>Reattach the harness cover to its original position and fix it with the removed screw.



5) Attach the exit tray.



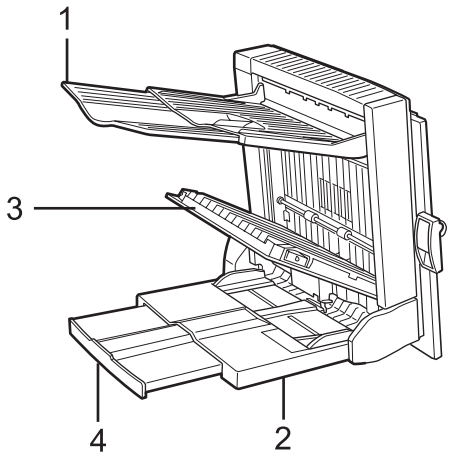
* If another peripheral device must be installed, carry out the following step at the end of the installation work.

6) Adjust the position of the paper guides of the bypass tray.
Refer to "Adjustments" described later.

7) Carry out the off center adjustment.

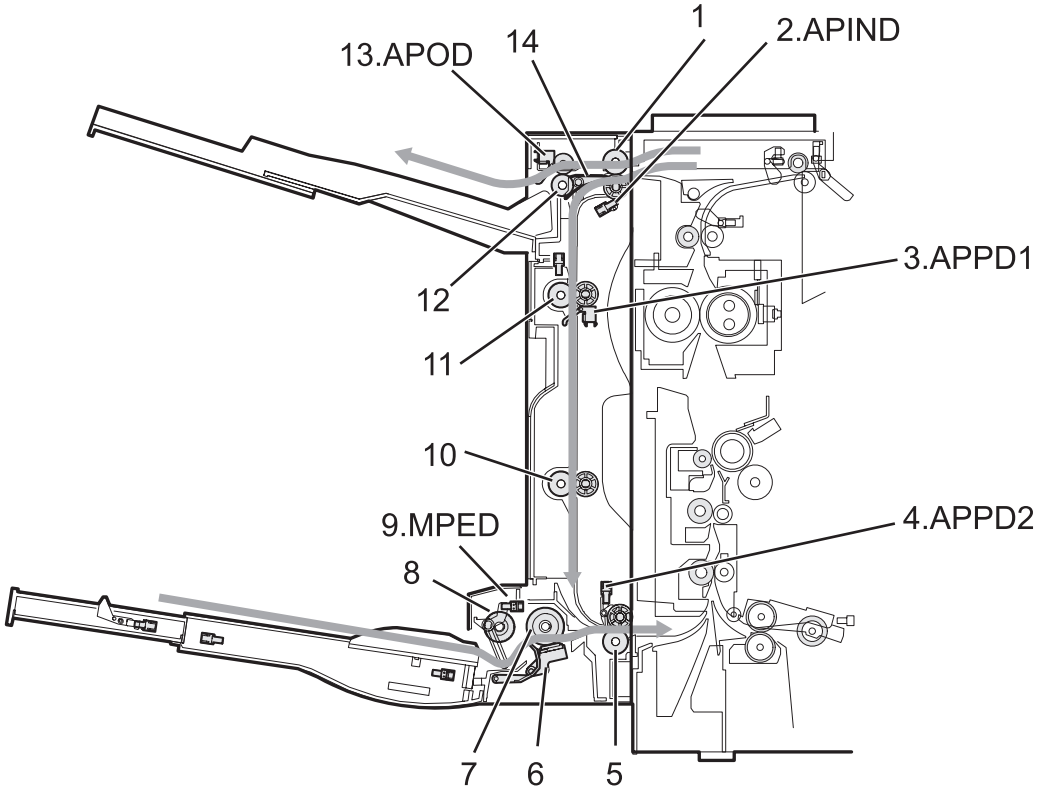
[5] EXTERNAL VIEWS AND INTERNAL STRUCTURES

A. External view



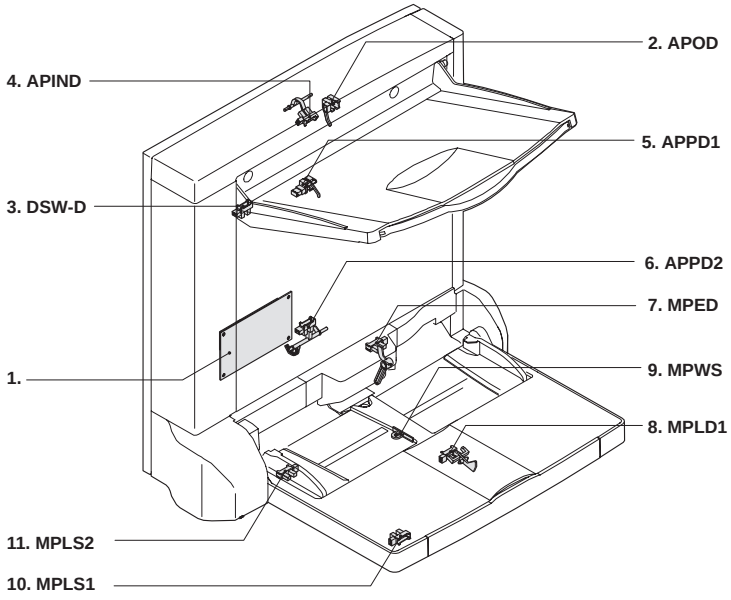
1	Paper exit tray (AR-TE3, AR-DU4 standard)	2	Manual paper feed tray (AR-DU4 only)	3	Paper feed module side cover
4	Manual paper fed extension tray				

B. Internal structure



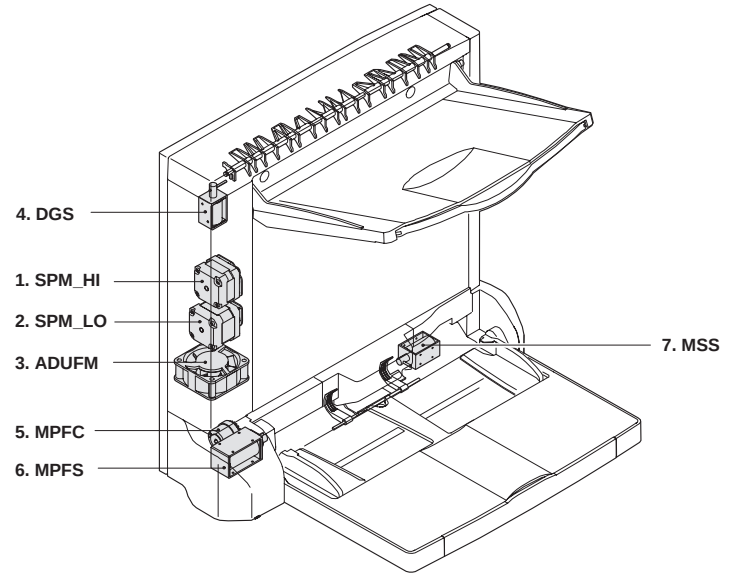
1	ADU paper entry roller	6	Separation pad	11	ADU transport roller 1
2	ADU paper entry sensor (APIND)	7	Manual paper feed roller	12	ADU paper exit roller
3	ADU transport sensor 1 (APPD1)	8	Manual take-up roller	13	ADU paper exit sensor (APOD)
4	ADU transport sensor 2 (APPD2)	9	Manual feed paper sensor (MPED)	14	ADU paper exit gate
5	ADU transport roller 3	10	ADU transport roller 2		

C. PWB, sensor



	Code	Name	Function	Active condition	Remark
1	ADU drive PWB	ADU drive PWB	Communication with the machine, ADU drive, control		
2	APOD	ADU paper exit sensor	Paper exit detection	L : Paper loaded	
3	DSW-D	ADU door sensor	Door open detection	L : Open	
4	APND	ADU paper entry sensor	Paper feed detection	L : Paper loaded	
5	APPD1	ADU transport sensor 1	Paper transport detection	L : Paper loaded	
6	APPD2	ADU transport sensor 2	Paper transport detection	L : Paper loaded	
7	MPED	Manual feed paper sensor	Manual feed tray paper empty detection	L : Paper loaded	AR-DU4 only
8	MPLD1	Manual feed paper length sensor	Manual feed tray paper length detection	H : Paper loaded	AR-DU4 only
9	MPWS	Manual feed paper width sensor	Manual feed tray paper width detection		AR-DU4 only
10	MPLS1	Tray pull-out sensor	Manual feed extension tray pull-out detection	H: Pulled out	AR-DU4 only
11	MPLS2	Tray installation sensor	Manual feed extension tray installation detection	H: Pushed in	AR-DU4 only

D. Motor, clutch, solenoid



	Code	Name	Function	Remark
1	SPM_HI	Upper transport motor	Upper section paper transport	
2	SPM_LO	Lower transport motor	Lower section paper transport	
3	ADUFM	Cooling fan motor	Cooling the ADU	
4	DGS	Gate solenoid upper	Gate select in duplex copy, paper exit	
5	MPFC	Manual paper feed clutch	Paper feed clutch from the manual paper feed tray	AR-DU4 only
6	MPFS	Manual paper feed solenoid	Paper feed solenoid from the manual paper feed tray	AR-DU4 only
7	MSS	Shutter solenoid	Shutter open/close in manual paper feed	AR-DU4 only

[6] MACHINE OPERATION

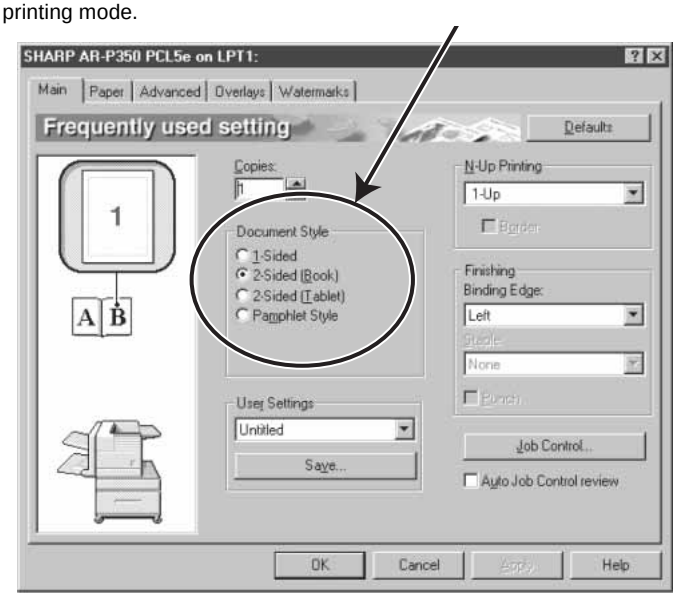
1. Setting the printer driver for duplex module, bypass tray and exit tray

When using the duplex module (including the bypass tray and the exit tray) for printing, select "Properties" and make selections as follows for the print job.

* The screens used in the following descriptions are for a PCL driver in the Windows 98 environment.

A. Two-sided printing

Open the "Main" tab and check the radio button of the desired two-sided printing mode.

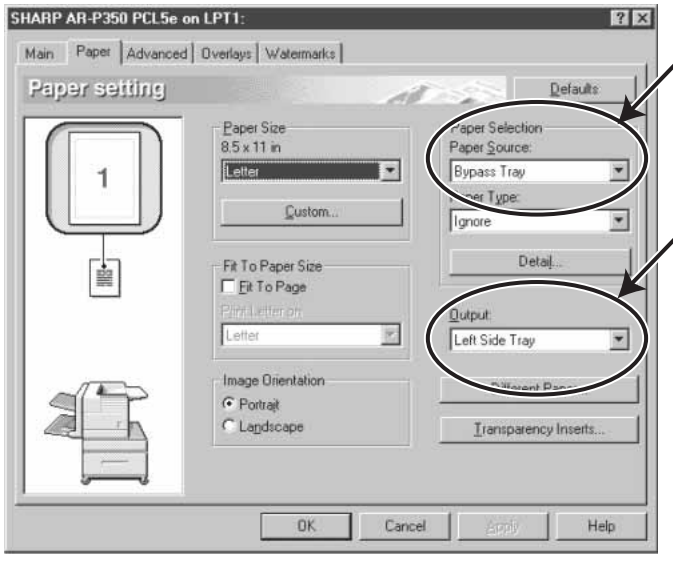


B. Using the bypass tray

Open the "Paper" tab shown in the illustration below and select "Bypass Tray" in the "Paper Selection" drop down.

C. Using the exit tray mounted to the duplex module

Open the "Paper" tab shown in the illustration below and select "Left Side Tray" in the "Output" drop down.



Note: The settings screens above will appear only if the devices have been set properly in the printer driver configuration

2. Copying in the duplex mode

For copying in the duplex mode, press the COPY key on the operation panel and make all selections on the copy mode basic screen.

A. Automatic duplex copying

Touch the [2-SIDED COPY] key on the copy mode basic screen.
A selection screen for two-sided copying will appear.

B.Using the bypass tray

Touch the [PAPER SELECT] key on the copy mode basic screen.
A selection screen for paper source will appear. Select the bypass tray on this screen.

C. Using the exit tray

Touch the [OUTPUT] key on the copy mode basic screen.
A selection screen for output will appear. Select the exit tray mounted to the duplex module on this screen.

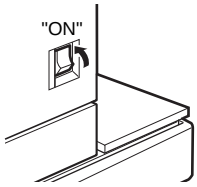
[7] ADJUSTMENTS

1. Paper guide position adjustment in the manual paper feed section (Printer model)

A. Correction value entry procedure

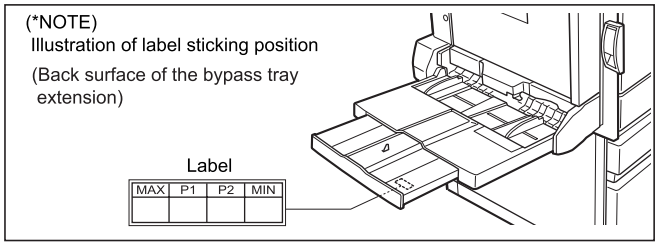
* This setup is used to enter the detection level to the printer when installing, etc.

1) Turn the main switch on while pressing the [MENU] key and the [OK] key of the operation panel of the main unit of the printer.



2) After pressing the [MENU] key several times to display "SIZE ADJUSTMENT A" in the message display, press the [△] key to display "SIZE ADJUSTMENT B" and press the [OK] key.

3) "MAXIMUM SIZE" is displayed.
Since "MAXIMUM SIZE" is displayed with a number, press the [△] key or the [▽] key to change the number so that the number is equal to the value of [MAX] written on the label(*NOTE) and then press the [OK] key.



4) Since "P1 SIZE" is displayed with a number, press the [△] key or the [▽] key to change the number so that the number is equal to the value of [P1] written on the label(*NOTE) and then press the [OK] key.

5) Since "P2 SIZE" is displayed with a number, press the [△] key or the [▽] key to change the number so that the number is equal to the value of [P2] written on the label(*NOTE) and then press the [OK] key.

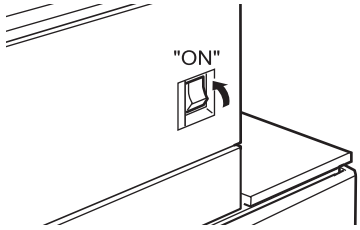
6) Since "MINIMUM SIZE" is displayed with a number, press the [△] key or the [▽] key to change the number so that the number is equal to the value of [MIN] written on the label (*NOTE) and then press the [OK] key.

7) Turn off the main switch to cancel the setting mode.

B. Alignment of the guide plate and the size mark

* This setup is used when the paper width sensor does not work correctly or when it is replaced with a new one.

1) Press and hold [MENU] key and [OK] key together, and turn on the main switch.

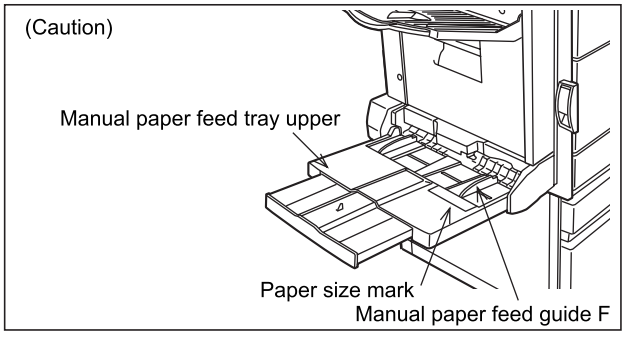


2) Press [MENU] key several times until "SIZE ADJUSTMENT A" is displayed. Press the [△] key to display "SIZE ADJUSTMENT C," and press [OK] key.

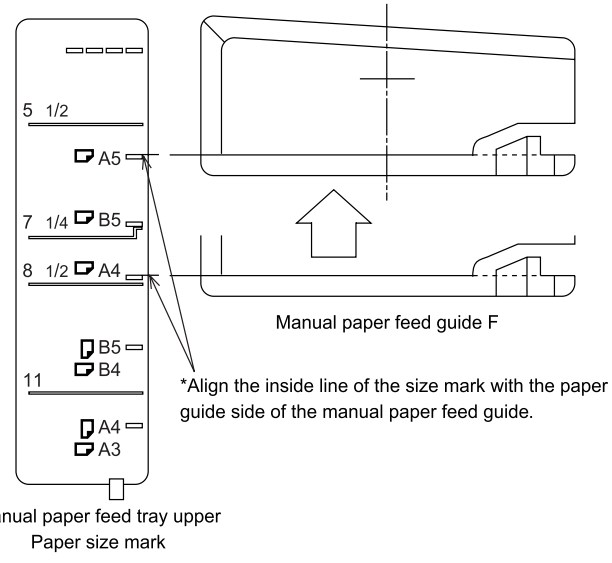
3) "MAXIMUM ISZE" is displayed.
Move the manual feed guide F to the maximum position, and press [OK] key.

4) "P1 SIZE" is displayed. Move the manual paper feed guide F to the size mark of A4R on the manual paper feed tray upper, and press [OK] key.

5) "P2 SIZE" is displayed. Move the manual paper feed guide F to the size mark of A5R on the manual paper feed tray upper, and press [OK] key.



Position of the manual paper feed guide F in setting of P1 (A4R) and P2 (A5R)



6) "MINIMUM SIZE" is displayed. Move the manual paper feed guide F to the minimum position, and press [OK] key.

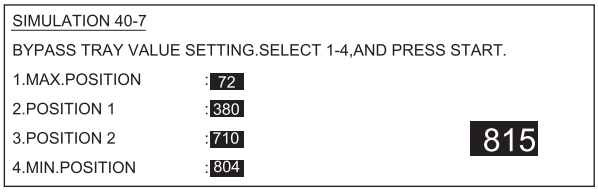
7) Turn off the main switch to cancel the setting mode.

2. Aper guide position adjustment in the manual paper feed section (MFP model)

A.Width detection level adjustment in simulations

* This setup is used to enter the detection level to the printer when installing, etc.

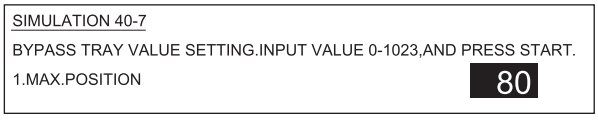
1) Enter the sub code of SIM 40-7, and the menu below will be displayed.



SIM 40-7: Menu display of width detection level adjustment

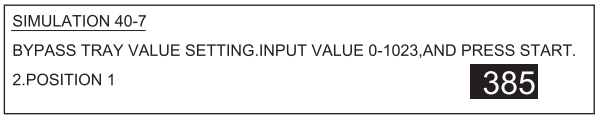
2) Under the above state 1), press [1] key and then [START] key, and the menu below will be displayed.

* Enter the value of "MAX" specified on the label with [0] - [9] keys. After entering the value of "MAX," press [CUSTOM SETTINGS] key, and menu 1) will be displayed.



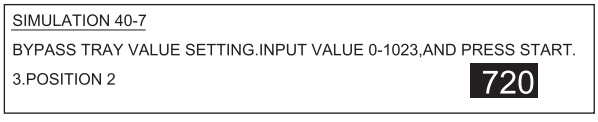
3) Under the state 1), press [2] key and then [START] key, and the menu below will be displayed.

* Enter the value of "P1" specified on the label with [0] - [9] keys. After entering the value of "P1," press [CUSTOM SETTINGS] key, and menu 1) will be displayed.



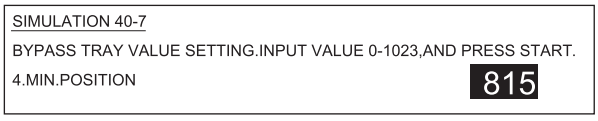
4) Under the state 1), press [3] key and then [START] key, and the menu below will be displayed.

* Enter the value of "P2" specified on the label with [0] - [9] keys. After entering the value of "P2," press [CUSTOM SETTINGS] key, and menu 1) will be displayed.



5) Under the state 1), press [3] key and then [START] key, and the menu below will be displayed.

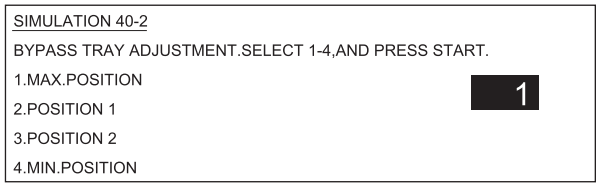
* Enter the value of "MIN" specified on the label with [0] - [9] keys. After entering the value of "MIN," press CUSTOM SETTINGS key, and menu (1) will be displayed.



B. Width detection level adjustment in simulations

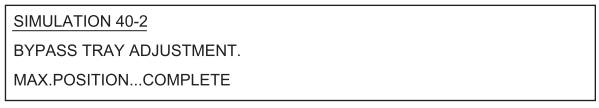
* This setup is used when the paper width sensor does not work correctly or when it is replaced with a new one.

1) Enter the sub code of SIM 40-2, and the menu below will be displayed.



SIM 40-2: Menu display of width detection level adjustment

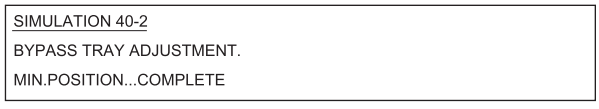
2) Under the above state 1), move the manual paper feed guide F to the MAX position and press [1] key and then [START] key, and the menu below will be displayed. Check that "COMPLETE" is displayed, and press [CUSTOM SETTING] key to return to the menu 1).



3) Move the manual paper feed guide F to the size mark of A4R on the manual paper feed tray upper. Press [2] key and then [START] key, and the menu below will be displayed. Check that "COMPLETE" is displayed, and press [CUSTOM SETTINGS] key to return to the menu 1).

4) Move the manual paper feed guide F to the size mark of A5R on the manual paper feed tray upper. Press [3] key and then [START] key, and the menu below will be displayed. Check that "COMPLETE" is displayed, and press [CUSTOM SETTINGS] key to return to the menu 1).

5) Move the manual paper feed guide F to the MIN position. Press [4] key and then [START] key, and the menu below will be displayed. Check that "COMPLETE" is displayed, and press [CUSTOM SETTINGS] key to return to the menu 1).



[8] DISASSEMBLY AND ASSEMBLY, MAINTENANCE

1.Maintenance System Table

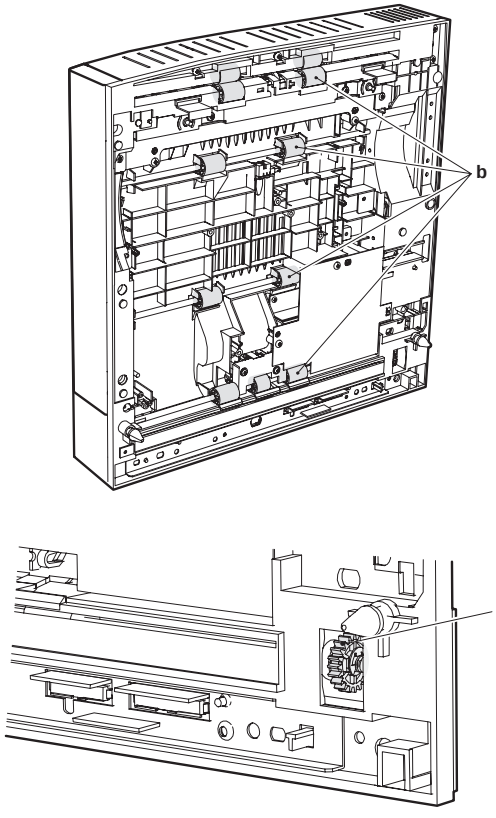
× Check (Clean, replace, or adjust as necessary.)　○ Clean　▲ Replace　△ Adjust　☆ Lubricate　□ Move position

Part name		When calling	50K	100K	150K	200K	250K	300K	350K	400K	Remark
Paper feed separation section (AR-DU4 only)	Paper feed rollers	(○) ×	○	×	○	×	○	×	○	×	*1
	Separation pad	(○) ×	○	×	○	×	○	×	○	×	*1
Transport section	Transport rollers	○	○	○	○	○	○	○	○	○	
	Transport paper guides	○	○	○	○	○	○	○	○	○	
Drive section	Gears	☆		☆		☆		☆		☆	(Specified position)
	Belts	×						×			
Other	Sensors	×		×		×		×		×	

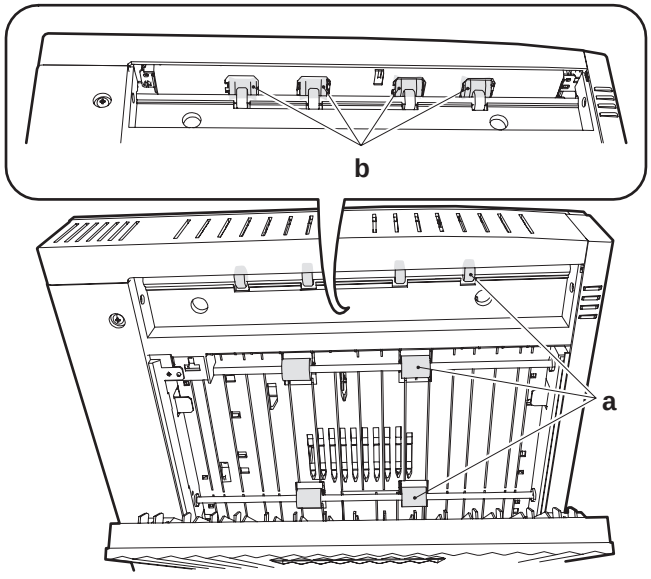
*1: Replacement reference: Use the counter value of each paper feed port.
Paper feed roller/Separation pad: 80K or 2 years

2. Maintenance

A. Unit installing side (Back)

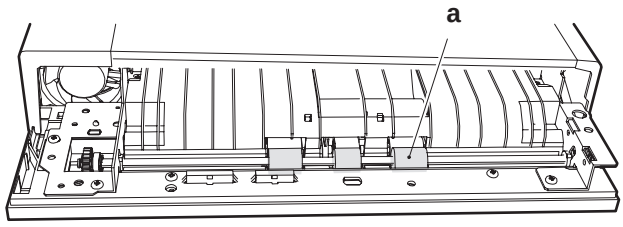


B. Inside of the paper exit section/ADU side door



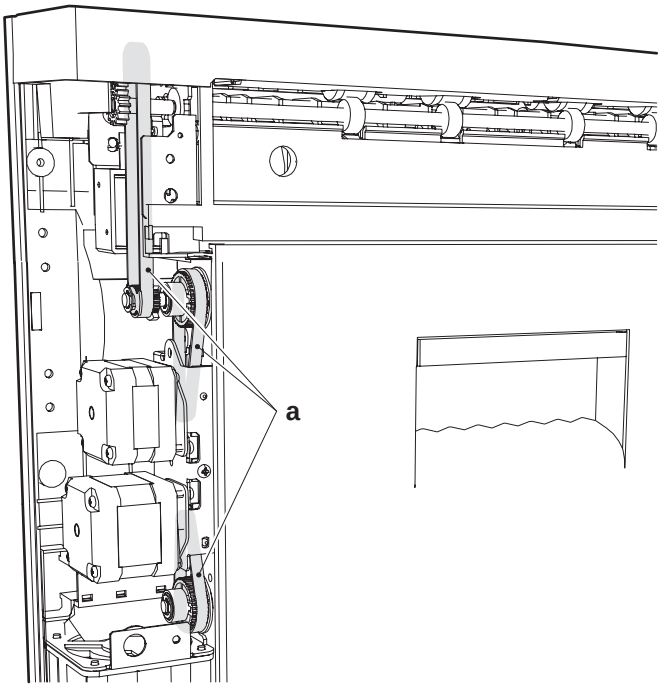
C. After disassembly of the paper feed unit/lower cover

* For disassembly of the paper feed unit and the lower cover, refer to the following descriptions.



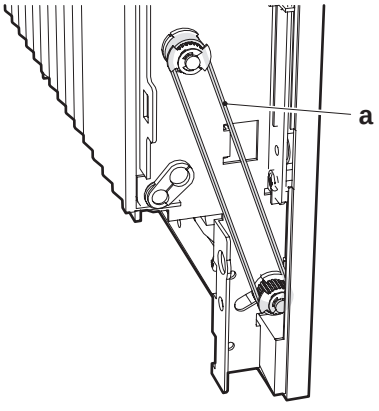
D. After disassembly of the rear cabinet

* For disassembly of the rear cabinet, refer to the following descriptions.



E. After disassembly of the front cabinet

* For disassembly of the front cabinet, refer to the following descriptions.

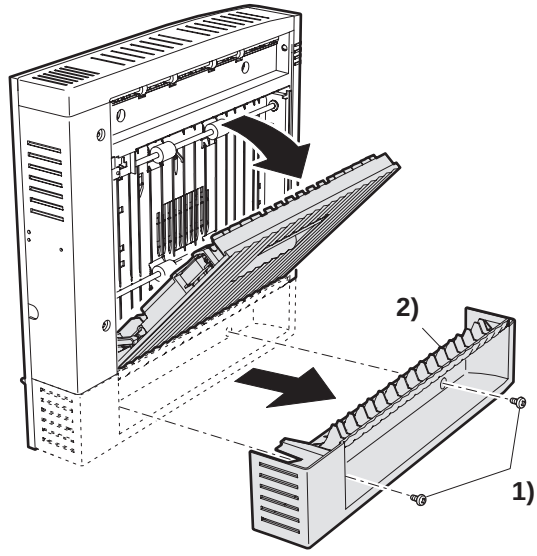


3. Disassembly and assembly

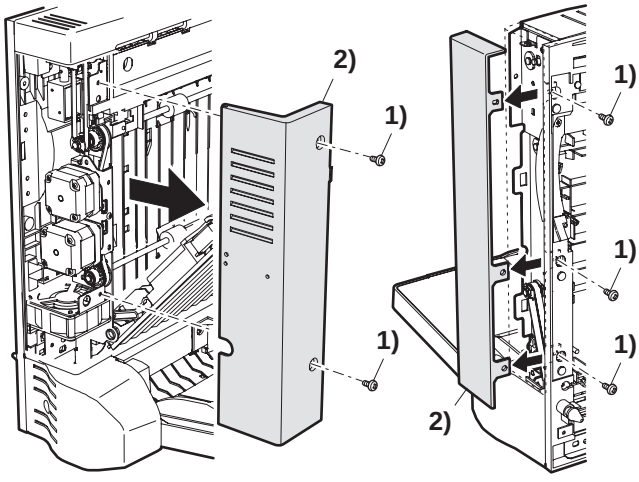
A. External cabinet

(1) ADU lower cover (AR-DU3 only)

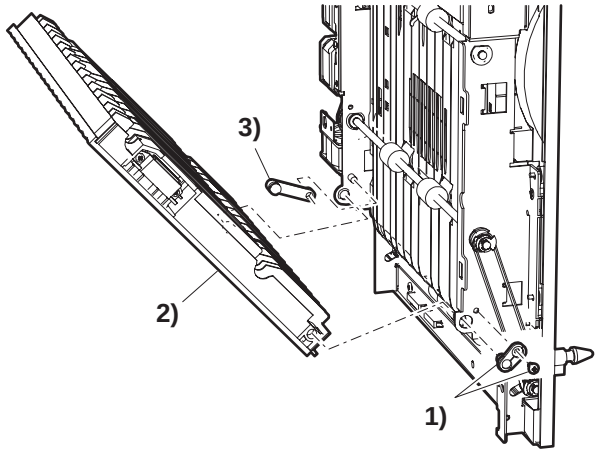
1) Open the ADU cover.
2) Remove the ADU lower cover.



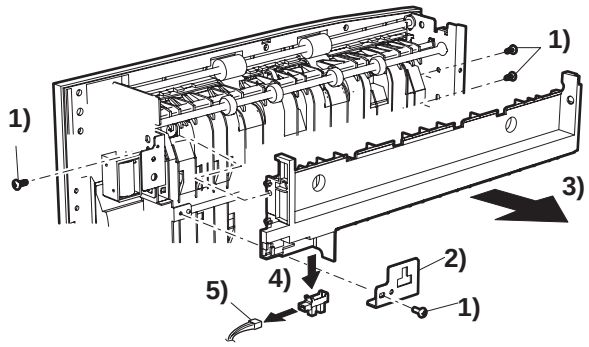
(2) Front and rear cabinets



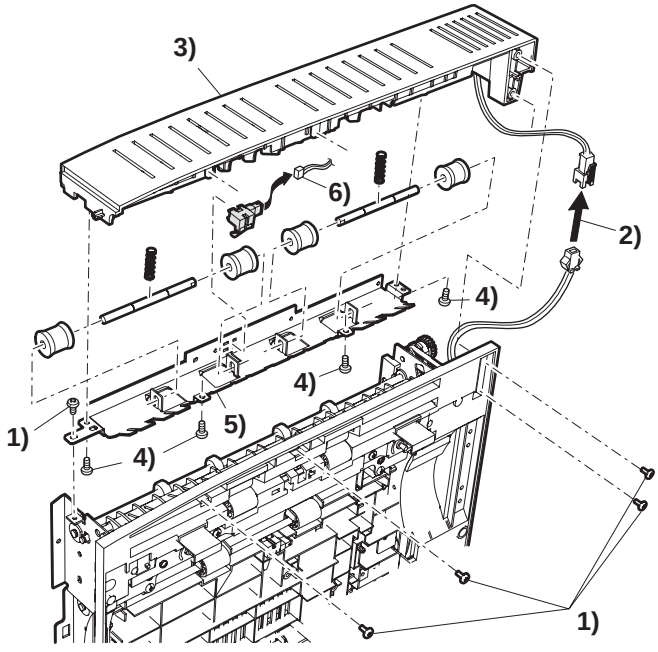
(3) ADU side door



(4) Paper exit section cover/door switch

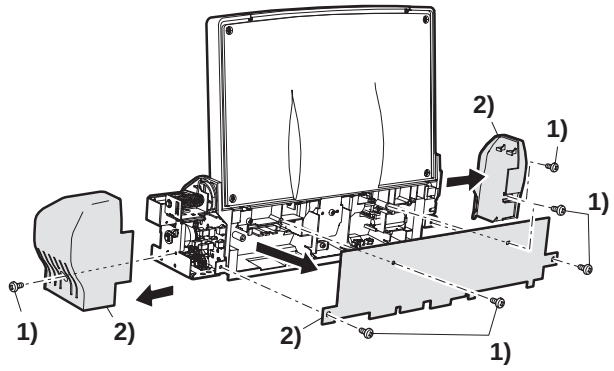


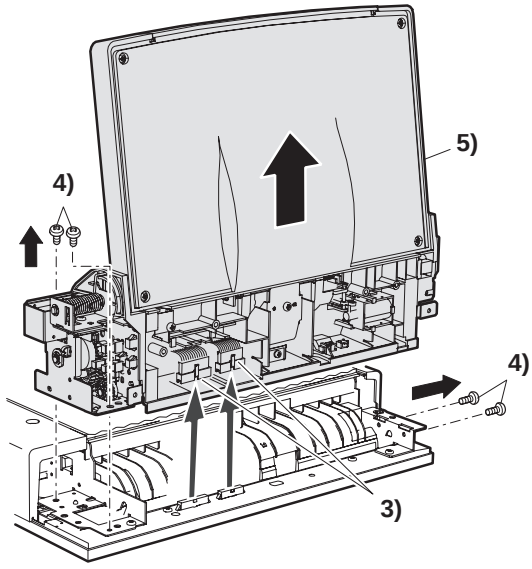
(5) Upper cabinet/paper exit sensor



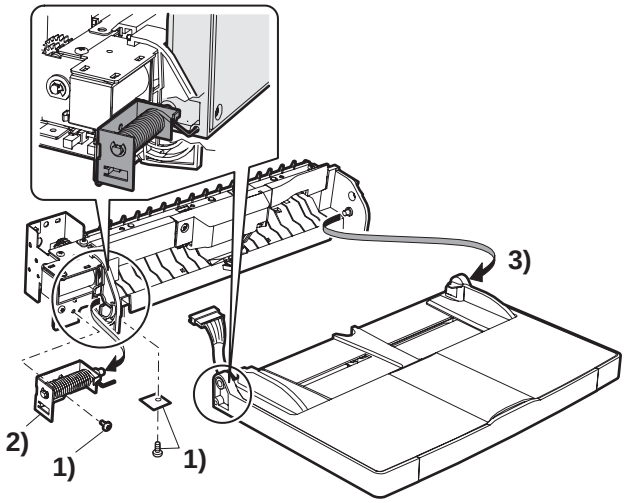
B. Manual paper feed section (AR-DU4 only)

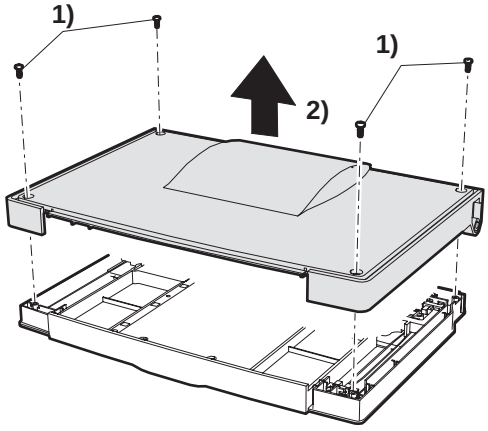
(1) Manual paper feed unit



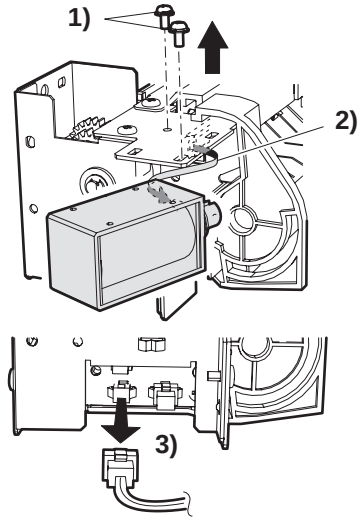


(2) Manual paper feed tray

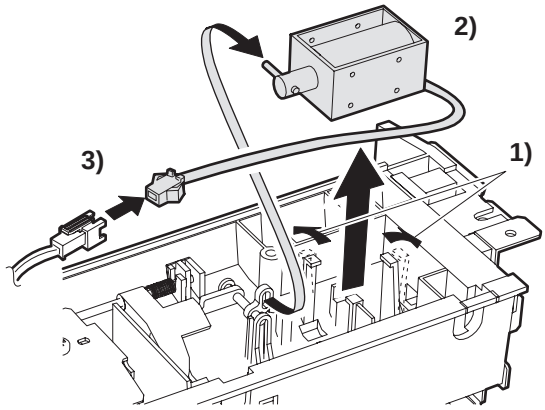




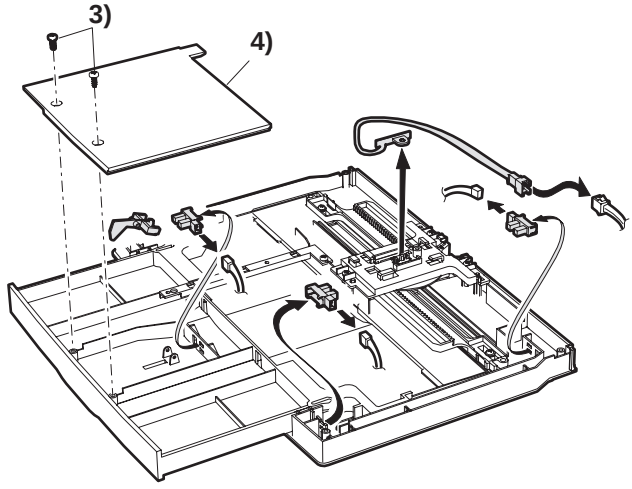
(3) Manual paper feed solenoid



(4) Shutter solenoid



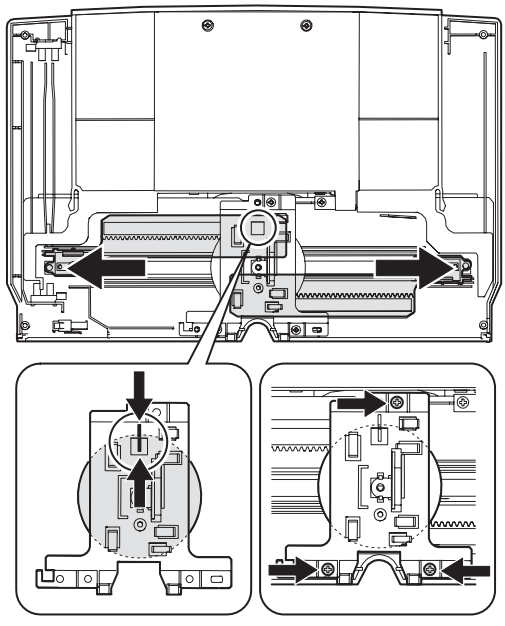
(5) Sensors



(6) Manual feed paper width sensor

1) Extend the manual paper feed guide to the maximum position.

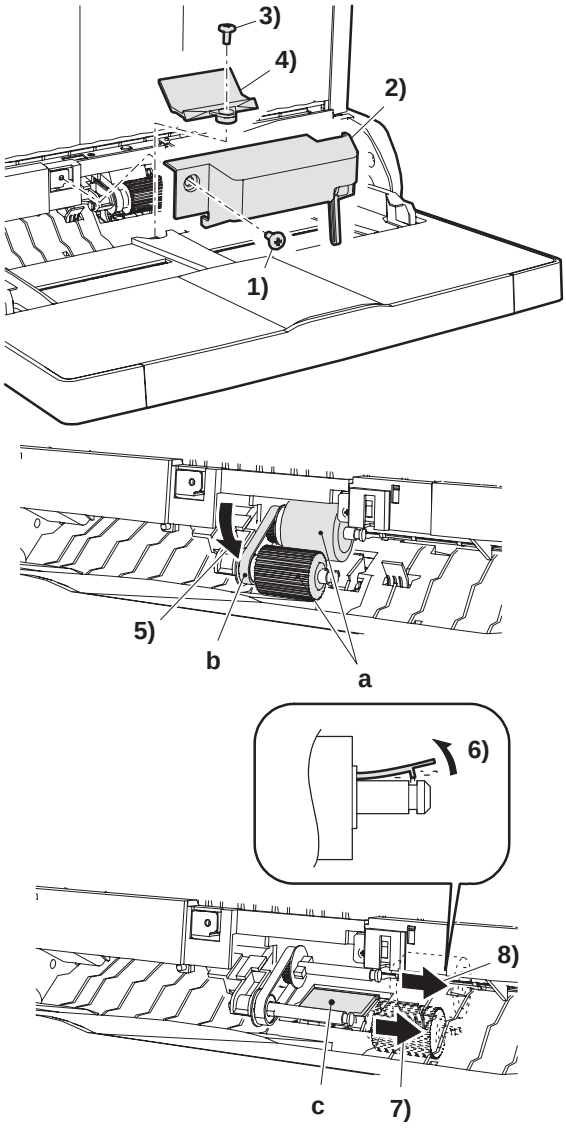
2) Fit the mark on the width detection pin on-gear with the mark on the volume mounting plate.



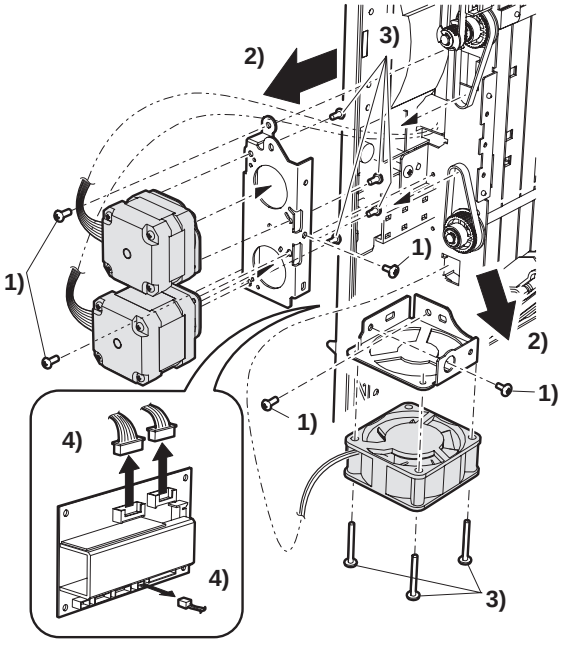
3) Fix the mounting plate with a screw.

* When the rotational volume sensor is replaced, the sensor value must be adjusted to the paper size (mark on the tray).
(Refer to the previous procedure of "Adjustment.")

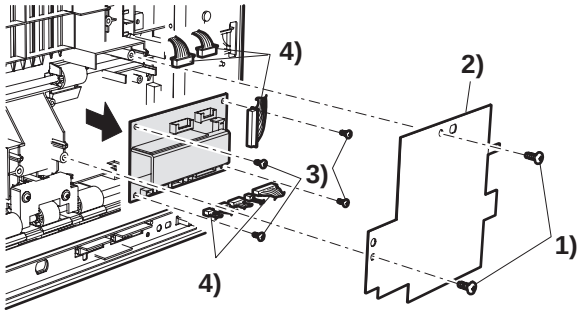
(7) Manual paper feed roller/Take-up roller



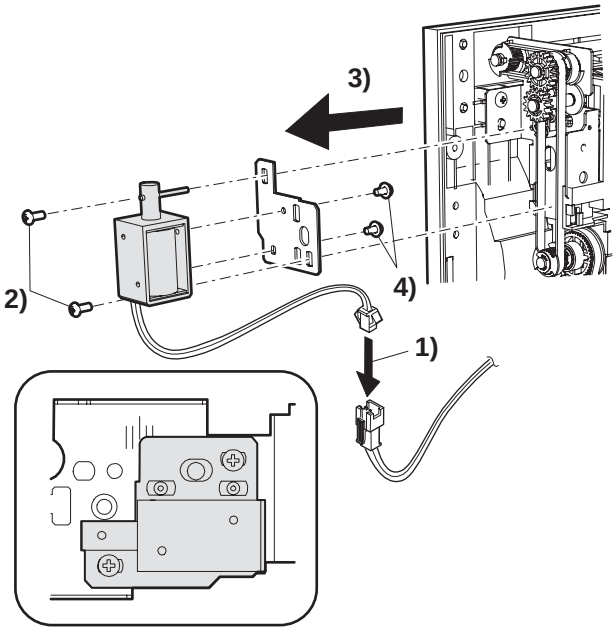
C. Upper transport motor/Lower transport motor/Fan motor



D. ADU drive PWB



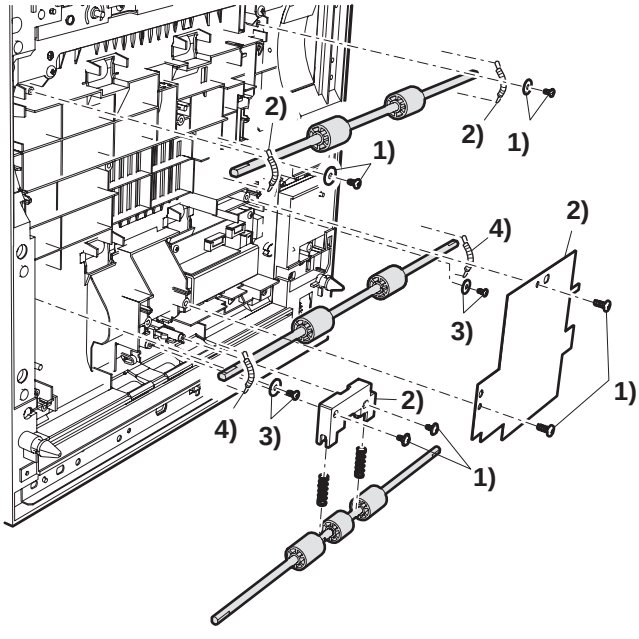
E. ADU gate solenoid



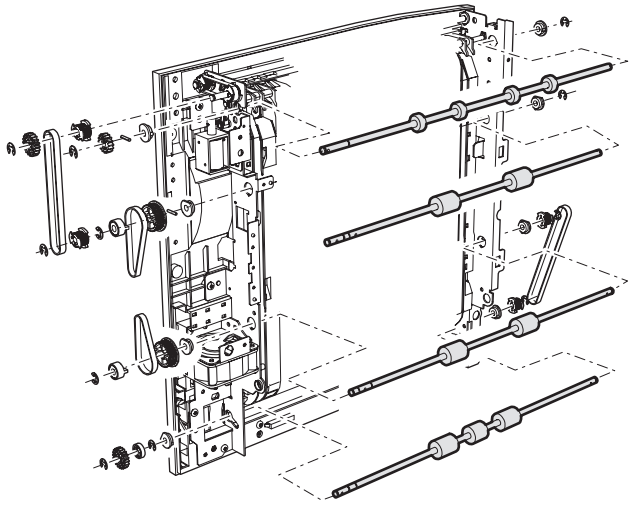
Note: When assembling, fit the edge of the solenoid mounting plate with the center of the mark.

F. Rollers/Belts/Clutches

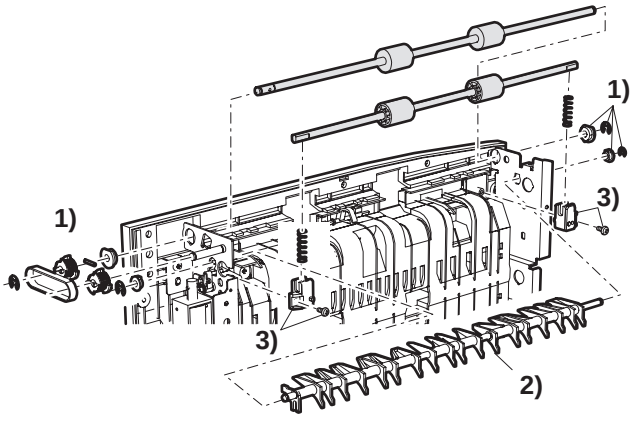
(1) Transport follower roller



(2) Transport roller/belt/clutch/gear

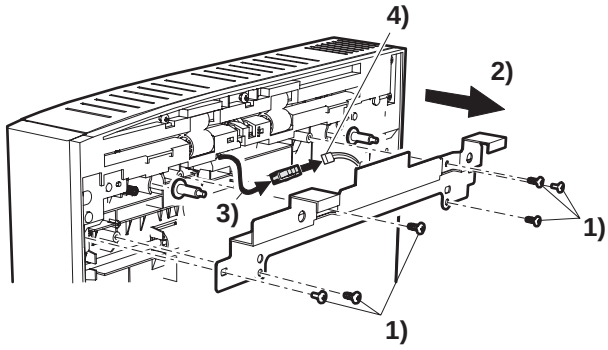


(3) ADU paper entry roller/belt/clutch/gear

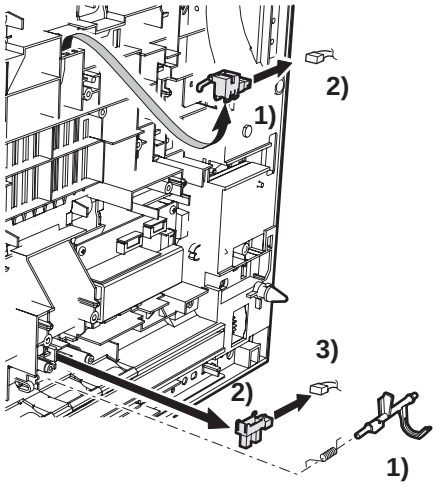


G. Sensors

(1) Paper entry sensor



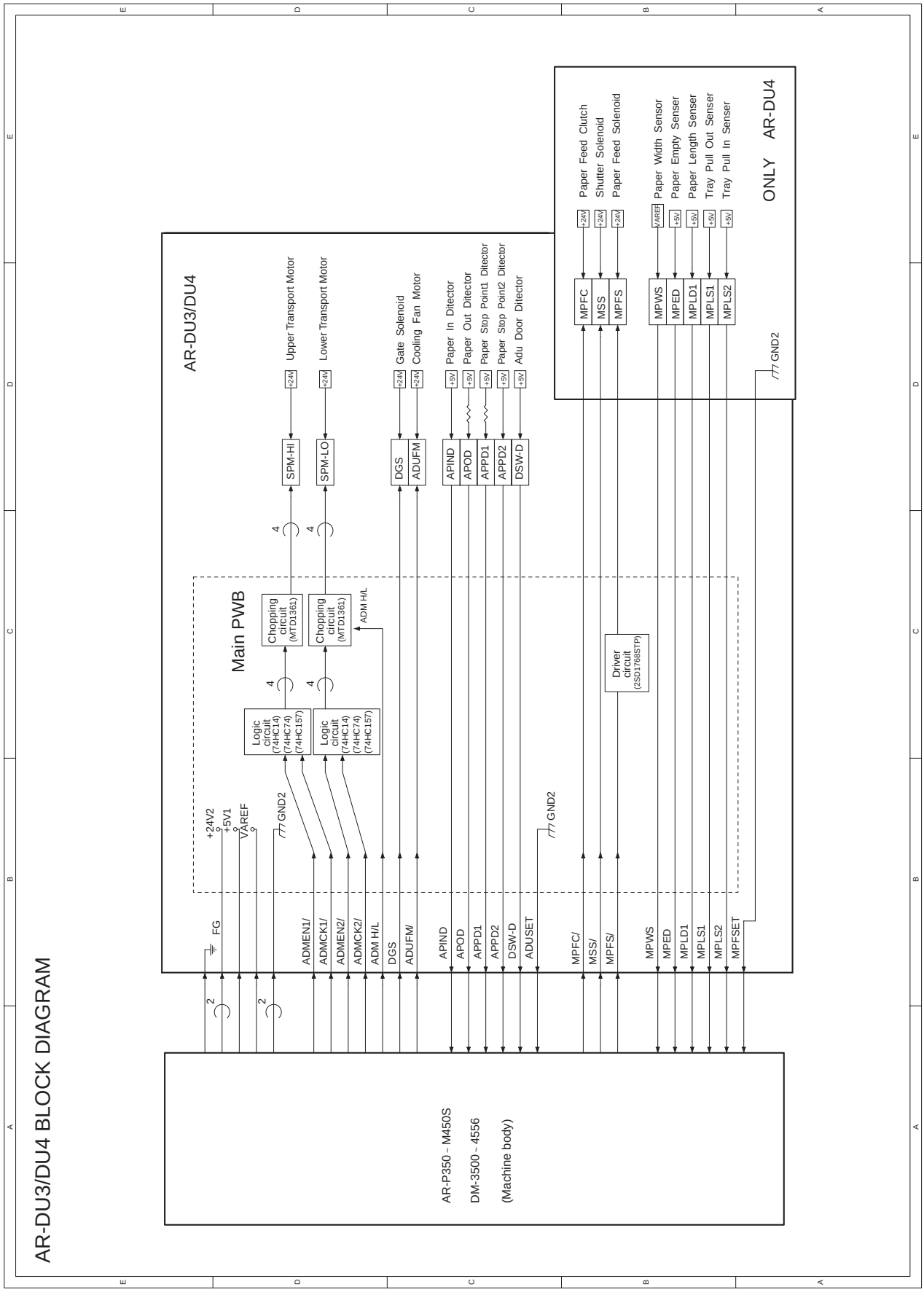
(2) Transport sensor



[9] BLOCK DIAGRAM, WIRING DIAGRAM

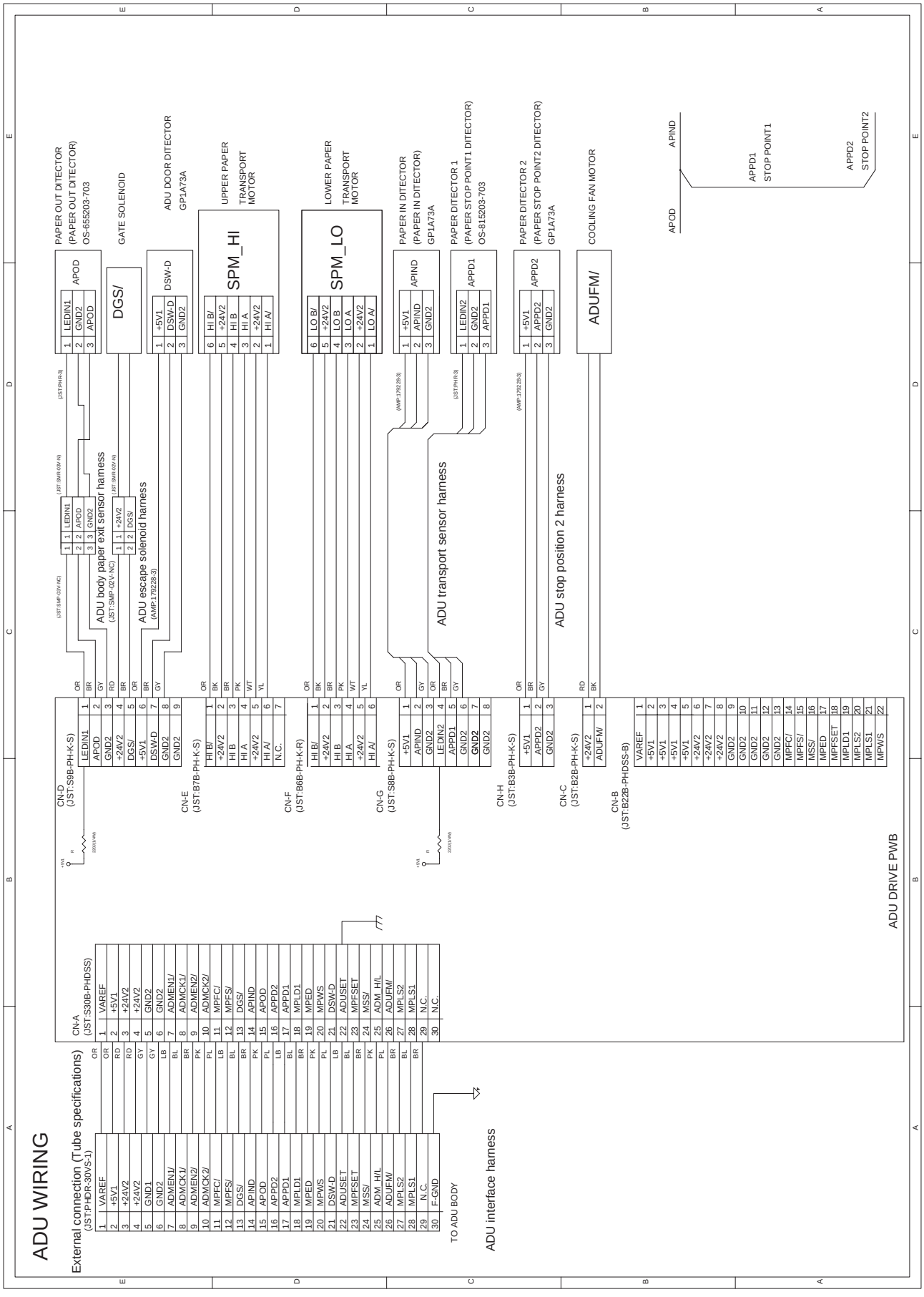
1. BLOCK DIAGRAM

A. AR-DU3/AR-DU4

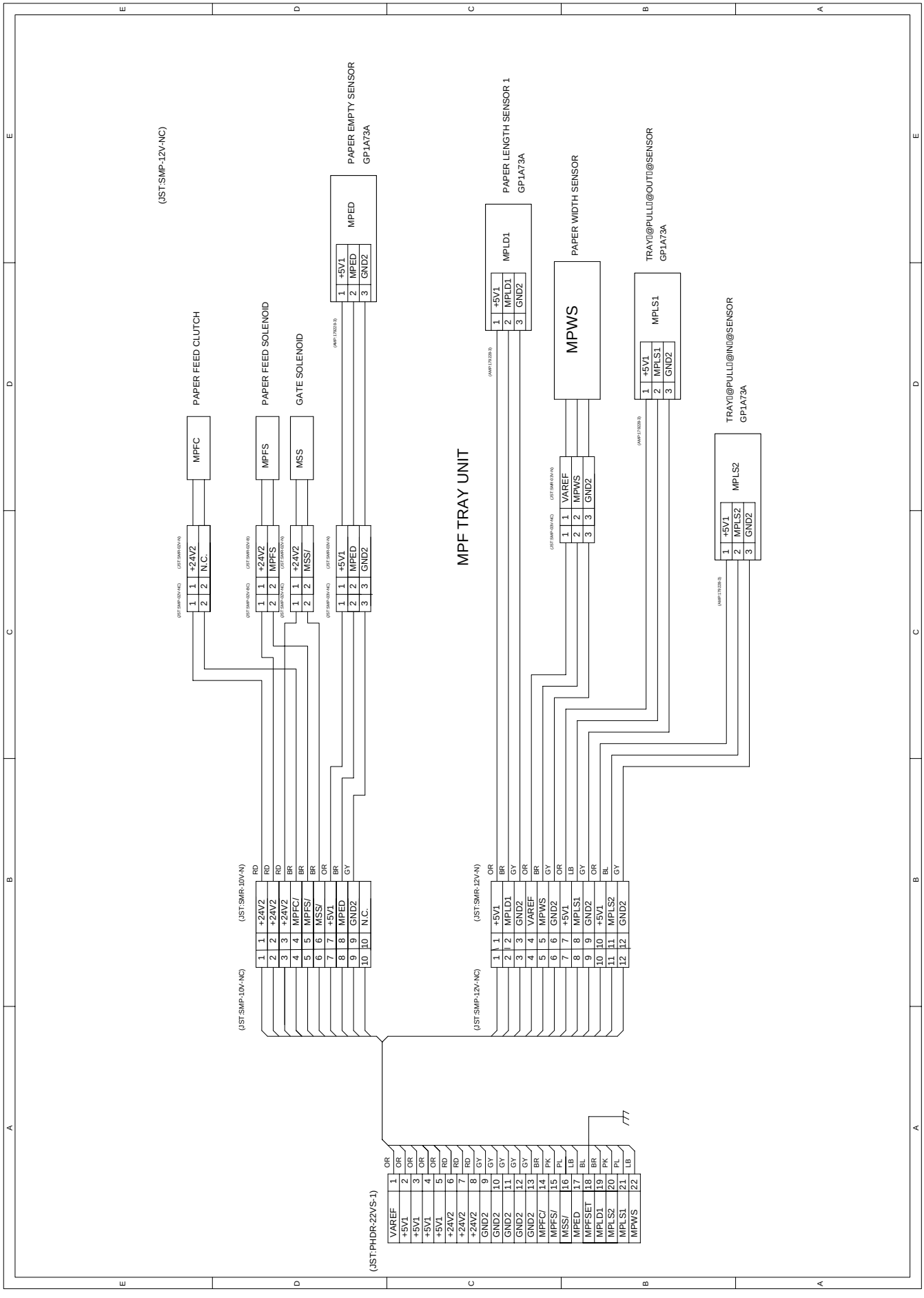


2. WIRING DIAGRAM

A. AR-DU3 / AR-DU4

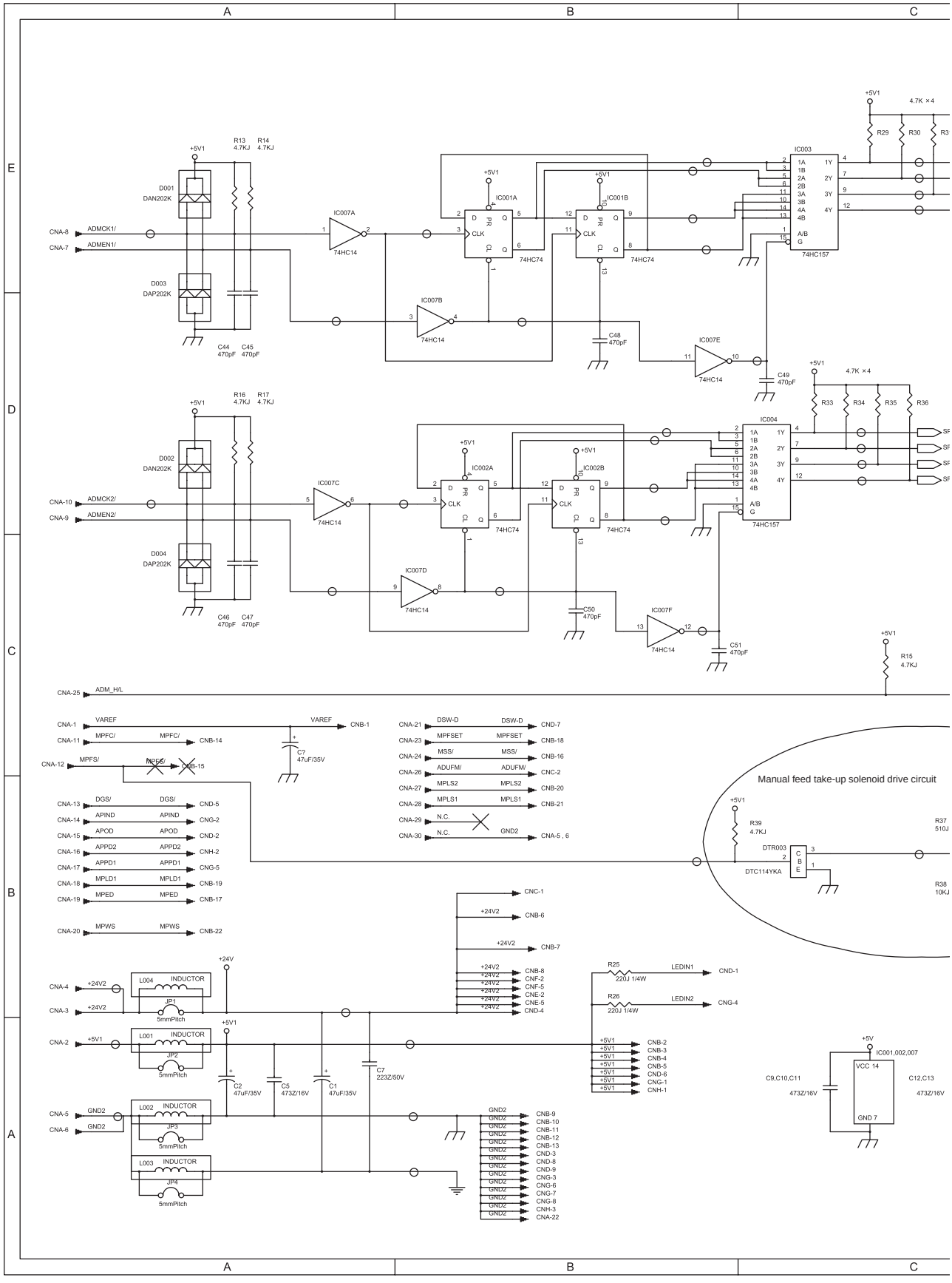


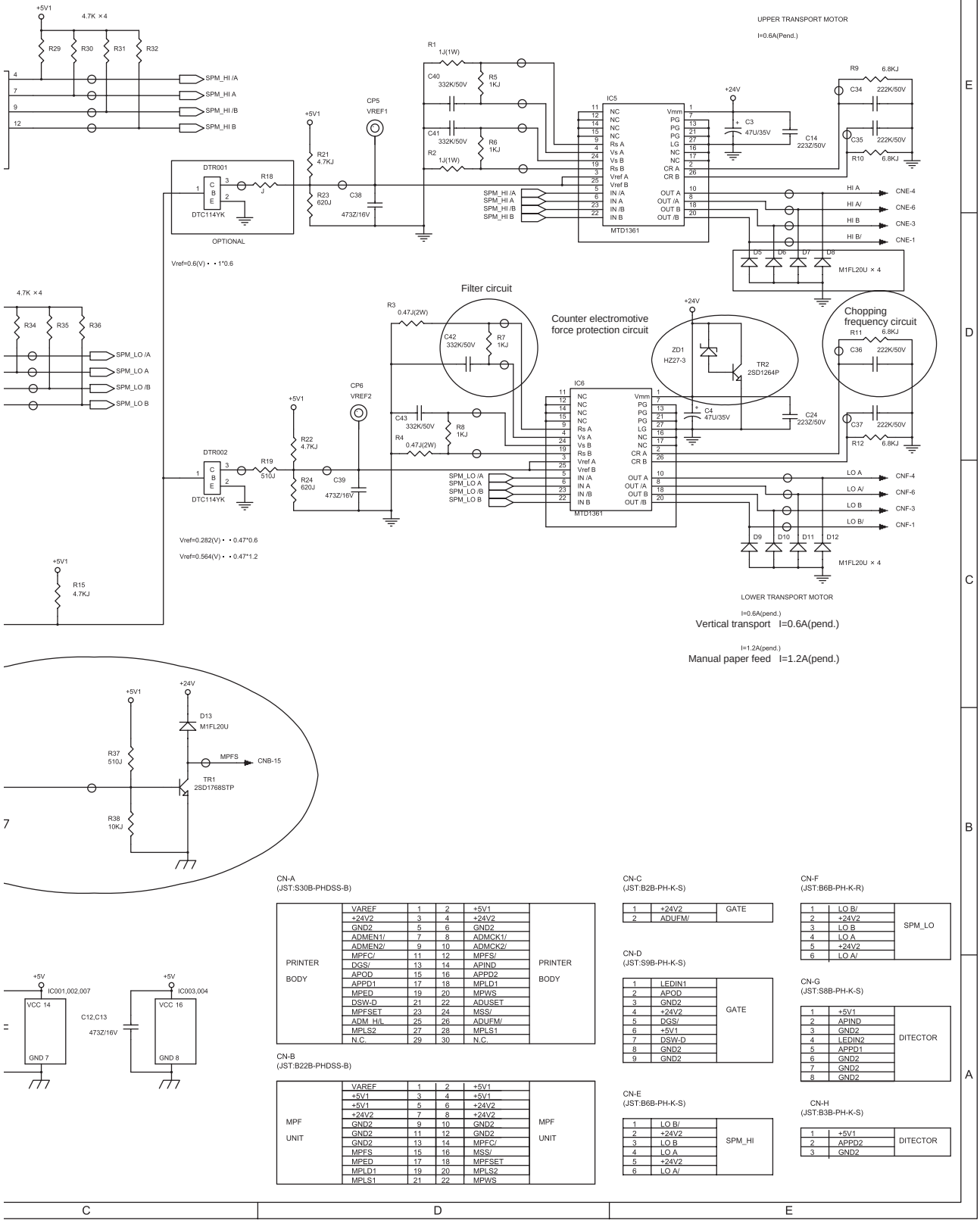
B. AR-DU4 (Manual paper feed section)



3. CIRCUIT DIAGRAM

A. AR-DU3 / AR-DU4





CN-A
(JST:S30B-PHDSS-B)

PRINTER BODY	VAREF	1	2	+5V1	PRINTER BODY
	+24V2	3	4	+24V2	
	GND2	5	6	GND2	
	ADMEN1/	7	8	ADMCK1/	
	ADMEN2/	9	10	ADMCK2/	
	MPFC/	11	12	MPFS/	
	DGS/	13	14	APIND	
	APOD	15	16	APPD2	
	APPD1	17	18	MPLD1	
	MPED	19	20	MPWS	
	DSW-D	21	22	ADUSET	
	MPFSET	23	24	MSS/	
	ADM_H/L	25	26	ADUFM/	
	MPLS2	27	28	MPLS1	
	N.C.	29	30	N.C.	

CN-B
(JST:B22B-PHDSS-B)

MPF UNIT	VAREF	1	2	+5V1	MPF UNIT
	+5V1	3	4	+5V1	
	+5V1	5	6	+24V2	
	+24V2	7	8	+24V2	
	GND2	9	10	GND2	
	GND2	11	12	GND2	
	GND2	13	14	MPFC/	
	MPFS	15	16	MSS/	
	MPED	17	18	MPFSET	
	MPLD1	19	20	MPLS2	
	MPLS1	21	22	MPWS	

CN-C
(JST:B2B-PH-K-S)

1	+24V2	GATE
2	ADUFM/	

CN-D
(JST:S9B-PH-K-S)

1	LEDIN1	GATE
2	APOD	
3	GND2	
4	+24V2	
5	DGS/	
6	+5V1	
7	DSW-D	
8	GND2	
9	GND2	

CN-E
(JST:B6B-PH-K-S)

1	LO B/	SPM_HI
2	+24V2	
3	LO B	
4	LO A	
5	+24V2	
6	LO A/	

CN-F
(JST:B6B-PH-K-R)

1	LO B/	SPM_LO
2	+24V2	
3	LO B	
4	LO A	
5	+24V2	
6	LO A/	

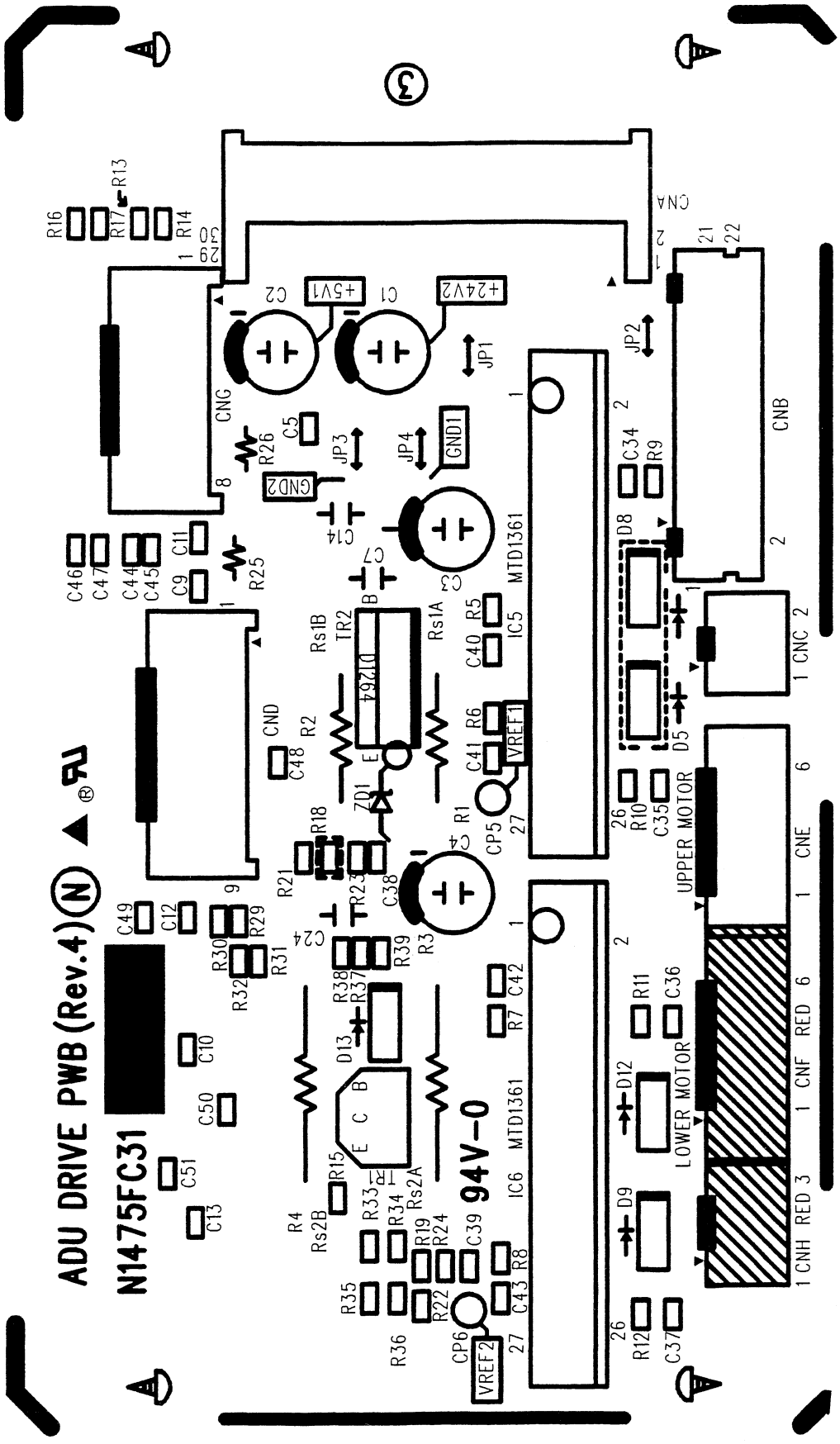
CN-G
(JST:S8B-PH-K-S)

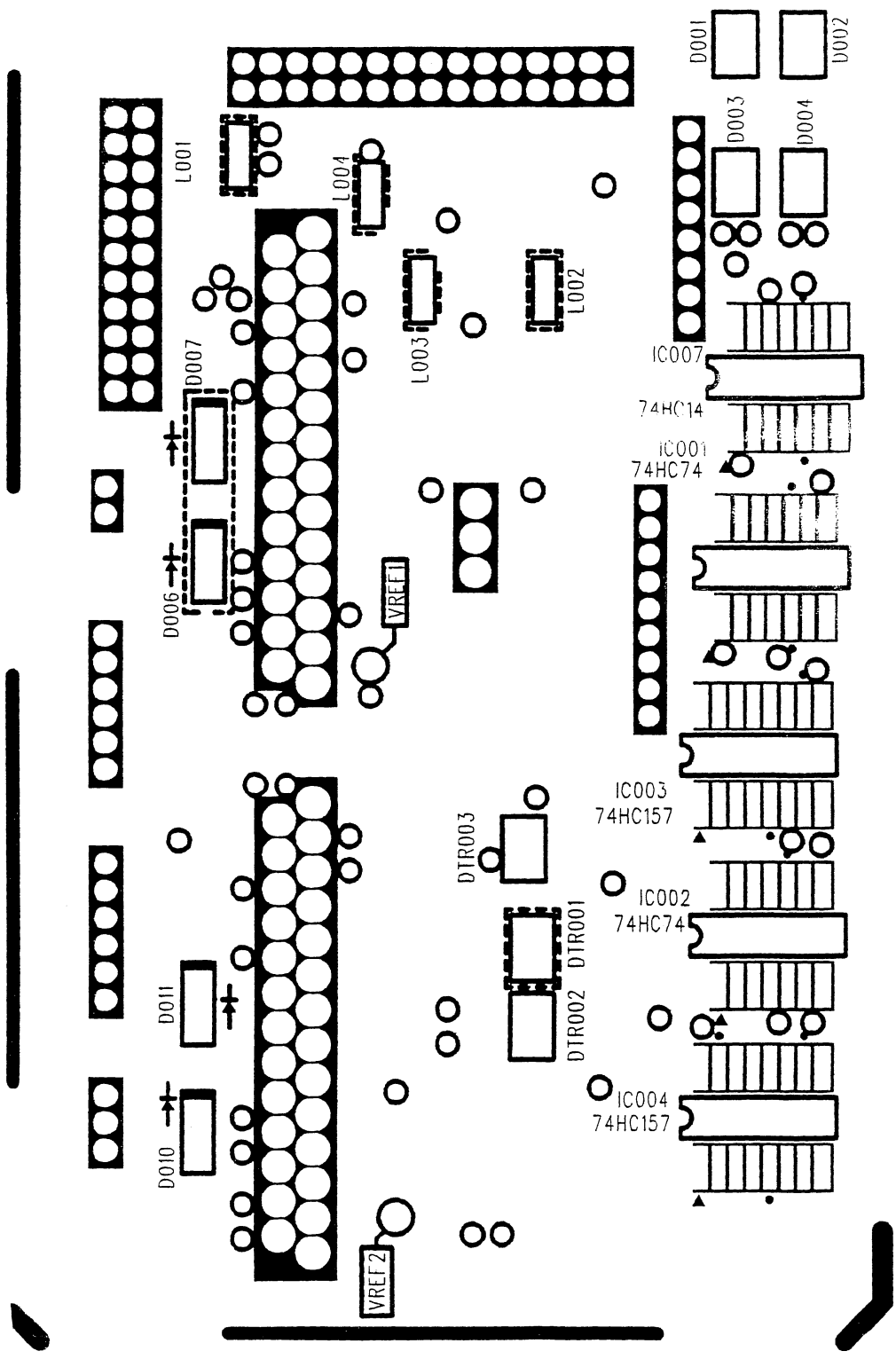
1	+5V1	DITECTOR
2	APIND	
3	GND2	
4	LEDIN2	
5	APPD1	
6	GND2	
7	GND2	
8	GND2	

CN-H
(JST:B3B-PH-K-S)

1	+5V1	DITECTOR
2	APPD2	
3	GND2	

4. Parts arrangement




D001
D002
D003
D004
L001
L004
L003
L002
IC007
74HC14
IC001
74HC74
D007
D006
VREF1
IC003
74HC157
DTR003
IC002
74HC74
D011
DTR001
DTR002
D010
IC004
74HC157
VREF2

CAUTION FOR BATTERY REPLACEMENT

(Danish) ADVARSEL !
Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri
af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandoren.

(English) Caution !
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type
recommended by the manufacturer.
Dispose of used batteries according to manufacturer's instructions.

(Finnish) VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden
mukaisesti.

(French) ATTENTION
Il y a danger d'explosion s' il y a remplacement incorrect
de la batterie. Remplacer uniquement avec une batterie du
même type ou d'un type équivalent recommandé par
le constructeur.
Mettre au rebut les batteries usagées conformément aux
instructions du fabricant.

(Swedish) VARNING
Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent
typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens
instruktion.

(German) Achtung
Explosionsgefahr bei Verwendung inkorrekter Batterien.
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder
vom Hersteller empfohlene Batterien verwendet werden.
Entsorgung der gebrauchten Batterien nur nach den vom
Hersteller angegebenen Anweisungen.

CAUTION FOR BATTERY DISPOSAL

(For USA,CANADA)

Contains lithium-ion battery. Must be disposed of properly.
Remove the battery from the product and contact
federal or state environmental
agencies for information on recycling and disposal options.

SHARP

COPYRIGHT © 2001 BY SHARP CORPORATION

All rights reserved.
Printed in Japan.
No part of this publication may be reproduced,
stored in a retrieval system, or transmitted,
in any form or by any means,
electronic, mechanical, photocopying, recording, or otherwise,
without prior written permission of the publisher.

Trademark acknowledgments

Windows and Windows NT are trademarks of Microsoft Corporation in the U.S.A. and other countries.
IBM and PC/AT are trademarks of International Business Machines Corporation.
PCL is a trademark of Hewlett-Packard Company.
Pentium is a registered trademark of Intel Corporation.
All other trademarks and copyrights are the property of their respective owners.

SHARP CORPORATION
Digital Document System Group
Quality & Reliability Control Center
Yamatokoriyama, Nara 639-1186, Japan

2001 April Printed in Japan Ⓝ